## ABSTRACT OF THE DISCLOSURE

The present invention provides an LSI inspection method and a defect inspection data analysis apparatus capable of shortening a time needed for a wafer test. In a first database 11 is stored inspection data obtained when each defect inspection apparatus 20 inspects a wafer for defects in the front-end process. In a second database 12 are stored non-conforming article judgment criteria for each predetermined type of defect, according to which a non-conforming chip is judged. A defective chip identifying portion 16 identifies a chip having a defect and identifies the type of defect for each defect that the identified chip has, on the basis of the inspection data. For each identified chip, a non-conforming chip judging portion 17 judges whether the chip is a non-conforming article or not according to the non-conforming article judgment criteria corresponding to the type of defect for each defect, and obtains position information within the wafer surface of a chip judged as being a non-conforming article. The position information thus obtained is transmitted to an LSI inspection apparatus 30 via a transmission portion 15.